This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-15 (previously cancelled)

Claim 16 (currently amended): A method of treating a ~~pathology~~ tumor in an animal or mammal caused by the absence of a tumor suppressor gene or the presence of a pathologically mutated tumor suppressor gene, the method comprising administering to the animal or mammal an effective amount of a recombinant adenovirus expression vector comprising: a) a partial or total deletion of a protein IX-encoding DNA sequence, and b) a gene encoding a foreign functional protein having a tumor suppressive function, under suitable conditions.

Claim 17 (original): The method of claim 16, wherein the foreign protein is a functional tumor suppressor protein.

Claim 18 (previously amended): A method of gene therapy comprising administering to a subject an effective amount of a recombinant adenovirus expression vector comprising: a) a partial or total deletion of a protein IX-encoding DNA sequence, and b) a gene encoding a foreign functional protein having a tumor suppressive function.

Claim 19 (previously amended): A method of inhibiting the proliferation of a tumor in an animal comprising administering an effective amount of a recombinant adenovirus expression vector comprising a partial or total deletion of a protein IX DNA sequence and a gene encoding a foreign functional protein having a tumor suppressive function under suitable conditions to the animal.

Claim 20 (original): The method of claim 19, wherein the gene encodes an anti-tumor agent.

Claim 21 (original): The method of claim 20, wherein the anti-tumor agent is a tumor suppressor gene.

Claim 22 (original): The method of claim 20, wherein the anti-tumor agent is a suicide gene or functional equivalent thereof.

Claim 23 (previously amended): The method of claim 21, wherein the tumor is non-small cell lung cancer, small cell lung cancer, hepatocarcinoma, melanoma, retinoblastoma, breast tumor, colorectal carcinoma, leukemia, lymphoma, brain tumor, cervical carcinoma, sarcoma, prostate tumor, bladder tumor, tumor of the reticuloendothelial tissues, Wilm's tumor, astrocytoma, glioblastoma, neuroblastoma, ovarian carcinoma, osteosarcoma, or renal cancer.

Claim 24 (original): The method of claim 19, wherein the vector is administered by intratumoral injection.

Claim 25 (previously cancelled)

Claim 26 (previously amended) A method for reducing the proliferation of tumor cells in a subject, the method comprising administering under suitable conditions an effective amount of an adenoviral expression vector comprising:

a) a partial or total deletion of a protein IX-encoding DNA sequence and

b) a gene encoding a suicide protein or a biologically active fragment thereof; and an effective amount of a thymidine kinase metabolite or a functional equivalent thereof.

Claim 27 (original): The method of claim 26, wherein the thymidine kinase metabolite is ganciclovir or 6-methoxypurine arabinonucleoside or a functional equivalent thereof.

Claim 28 (original): The method of claim 26, wherein the adenoviral expression vector is administered by injection into the tumor mass.

Claim 29 (original): The method of claim 26, wherein the tumor cells are hepatocellular carcinoma.

Claim 30 (original): The method of claim 29, wherein the adenoviral expression vector is administered directly into the hepatic artery of the subject.

Claim 31 (previously amended): A kit for reducing the proliferation of tumor cells comprising the components of the adenoviral expression vector of claim 26, a thymidine kinase metabolite or functional equivalent thereof, pharmaceutical carriers and instructions for the treatment of hepatocellular carcinoma using the kit components.

Claim 32 (previously added): A method for obtaining expression of a tumor suppressor gene in a cell, the method comprising contacting the cell with an effective amount of a recombinant adenovirus expression vector comprising: a) a partial or total deletion of a protein IX-encoding DNA sequence, and b) a gene encoding a foreign protein having a tumor suppressive function; wherein the foreign protein is produced by the cell.

Claim 33 (previously added) The method of claim 32, wherein the cell is present in a mammal.

Claim 34 (previously added) The method of claim 33, wherein the cell is a tumor cell.

Claim 35 (previously added) The method of claim 34, wherein the contacting of the tumor cell by the recombinant adenovirus expression vector is

accomplished by intratumoral or peritumoral injection of the recombinant adenovirus expression vector.

Claim 36 (previously added) The method of claim 32, wherein the foreign protein is a functional tumor suppressor protein.

Claim 37 (previously added) A method for obtaining expression of a suicide protein in a cell, the method comprising administering to the cell an effective amount of a recombinant adenovirus expression vector comprising: a) a partial or total deletion of a protein IX-encoding DNA sequence, and b) a gene encoding a suicide protein;

wherein an mRNA encoding the suicide protein is produced by the cell.

Claim 38 (previously added) The method of claim 37, wherein the cell is present in a mammal.

Claim 39 (previously added) The method of claim 38, wherein the cell is a tumor cell.

Claim 40 (previously added) The method of claim 39, wherein the contacting of the tumor cell by the recombinant adenovirus expression vector is accomplished by intratumoral or peritumoral injection of the recombinant adenovirus expression vector.

Claim 41 (previously added) The method of claim 37, wherein the suicide protein is a functional thymidine kinase protein, a functional *E. coli DEO Δ* protein, or a functional cytosine deaminase protein.